

I CLAIM AS MY INVENTION:

1. A device for exchanging gas volumes in an anesthetic system, said device comprising:

an inlet;

an outlet;

a first chamber disposed between the inlet and the outlet;

a second chamber disposed between the inlet and the outlet;

a switching valve for selectively placing one of said first chamber or said second chamber in fluid communication with said inlet and said outlet to form a flow path between said inlet and said outlet; and

a controller connected to said switching valve for controlling switching of said switching valve.

2. A tubing system for use in an anesthetic system, said tubing system comprises;

a unit for adsorption and desorption of gaseous anesthetic;

an expiration branch adapted for respiratory communication with a respirating subject, said expiration branch being disposed upstream of said unit for adsorption and desorption of gaseous anesthetic; and

a gas volume exchanger connected in said expiration branch, said gas volume exchanger comprising an inlet and outlet, a first chamber disposed between the inlet and the outlet, a second chamber disposed between the inlet and the outlet, a switching valve for selectively placing one of said first chamber or said second chamber in fluid communication with said inlet and said outlet to form a flow path

between said inlet and said outlet, and a controller for controlling switching of said switching valve.

3. An anesthetic system comprising:

an anesthetic apparatus and a tubing system adapted to deliver gaseous anesthetic to a respirating subject;

said tubing system having an expiration branch and a unit for adsorption and desorption on said gaseous anesthetic, said expiration branch being disposed upstream of said unit for adsorption and desorption of said gaseous anesthetic; and

a gas volume exchanger connected in said expiration branch, said gas volume exchanger comprising an inlet, an outlet, a first chamber disposed between the inlet and the outlet, a second chamber disposed between the inlet and the outlet, a switching valve for selectively placing one of said first chamber or said second chamber in fluid communication with said inlet and said outlet to form a flow path between said inlet and said outlet, and a controller for controlling switching of said switching valve.